

SEQUENCE LISTING

<110> Gallatin, Michael W.
Van der Vieren, Monica

<120> Novel Human B2

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<151> 1994-08-05

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<170> PatentIn Ver. 2.0

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Val	Gly	Ala	Pro	Leu	Glu	Val	Val	Ala	Ala	Asn	Gln	Thr	Gly	Arg	Leu	
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Tyr	Asp	Cys	Ala	Ala	Ala	Thr	Gly	Met	Cys	Gln	Pro	Ile	Pro	Leu	His	
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Ser Arg Trp Glu Ile Ile Gln Thr Val Pro Asp Ala Thr Pro Glu Cys	
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Met 945	Lys	Glu	Ala	Glu	His 950	Arg	Tyr	Arg	Val	Asn 955	Asn	Leu	Ser	Gln	Arg 960
Asp	Leu	Ala	Ile	Ser 965	Ile	Asn	Phe	Trp	Val 970	Pro	Val	Leu	Leu	Asn	Gly 975
Val	Ala	Val	Trp 980	Asp	Val	Val	Met	Glu 985	Ala	Pro	Ser	Gln	Ser	Leu	Pro 990
Cys	Val	Ser 995	Glu	Arg	Lys	Pro	Pro 1000	Gln	His	Ser	Asp	Phe 1005	Leu	Thr	Gln 1010
Ile	Ser 1010	Arg	Ser	Pro	Met	Leu	Asp 1015	Cys	Ser	Ile	Ala 1020	Asp	Cys	Leu	Gln 1025

Asn Leu Arg Gln Gln Pro Gln Lys Phe Pro Glu Ala Leu Arg Gly Cys
130 135 140

Pro	Gln	Glu	Asp	Ser	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	Gly	Ser	
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Met	Glu	Gln	Leu	Lys	Lys	Ser	Lys	Thr	Leu	Phe	Ser	Leu	Met	Gln	Tyr	
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Ser	Glu	Glu	Phe	Arg	Ile	His	Phe	Thr	Phe	Lys	Glu	Phe	Gln	Asn	Asn	
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Leu	Ala	Glu	Asp	Ala	Gln	Arg	Leu	Phe	Thr	Ala	Leu	Phe	Pro	Phe	Glu	
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Phe	Ser	Phe	Met	Ser	Leu	Asp	Cys	Leu	Val	Val	Gly	Gly	Pro	Arg	Glu	
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Phe	Asn	Val	Thr	Val	Thr	Val	Arg	Asn	Asp	Gly	Glu	Asp	Ser	Tyr	Arg	
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Thr Gln Val Thr Phe Phe Phe Pro Leu Asp Leu Ser Tyr Arg Lys Val
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Ser Thr Leu Gln Asn Gln Arg Ser Gln Arg Ser Trp Arg Leu Ala Cys
835 840 845

Glu Ser Ala Ser Ser Thr Glu Val Ser Gly Ala Leu Lys Ser Thr Ser
850 855 860

Cys Ser Ile Asn His Pro Ile Phe Pro Glu Asn Ser Glu Val Thr Phe
865 870 875 880

Asn Ile Thr Phe Asp Val Asp Ser Lys Ala Ser Leu Gly Asn Lys Leu
885 890 895

Leu Leu Lys Ala Asn Val Thr Ser Glu Asn Asn Met Pro Arg Thr Asn
900 905 910

Lys Thr Glu Phe Gln Leu Glu Leu Pro Val Lys Tyr Ala Val Tyr Met
915 920 925

Val Val Thr Ser His Gly Val Ser Thr Lys Tyr Leu Asn Phe Thr Ala
930 935 940

Ser Glu Asn Thr Ser Arg Val Met Gln His Gln Tyr Gln Val Ser Asn
945 950 955 960

Leu Gly Gln Arg Ser Leu Pro Ile Ser Leu Val Phe Leu Val Pro Val
965 970 975

Arg Leu Asn Gln Thr Val Ile Trp Asp Arg Pro Gln Val Thr Phe Ser
980 985 990

Glu Asn Leu Ser Ser Thr Cys His Thr Lys Glu Arg Leu Pro Ser His
995 1000 1005

Ser Asp Phe Leu Ala Glu Leu Arg Lys Ala Pro Val Val Asn Cys Ser
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Ile Ala Val Cys Gln Arg Ile Gln Cys Asp Ile Pro Phe Phe Gly Ile
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Gln Glu Glu Phe Asn Ala Thr Leu Lys Gly Asn Leu Ser Phe Asp Trp
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Tyr Ile Lys Thr Ser His Asn His Leu Leu Ile Val Ser Thr Ala Glu
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Ile Leu Phe Asn Asp Ser Val Phe Thr Leu Leu Pro Gly Gln Gly Ala
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Phe Val Arg Ser Gln Thr Glu Thr Lys Val Glu Pro Phe Glu Val Pro
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305					310					315					320
Ala	Leu	Lys	Asp	Ile	Gln	Asn	Gln	Leu	Lys	Glu	Lys	Ile	Phe	Ala	Ile
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Glu	Gly	Thr	Glu	Thr	Ile	Ser	Ser	Ser	Ser	Phe	Glu	Leu	Glu	Met	Ala
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Gln	Glu	Gly	Phe	Ser	Ala	Val	Phe	Thr	Pro	Asp	Gly	Pro	Val	Leu	Gly
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			580					585					590		

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Tyr	Ile	Asp	Lys	Arg	Ser	Lys	Asn	Leu	Leu	Gly	Ser	Arg	Asp	Leu	Gln
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Ser	Ser	Val	Thr	Leu	Asp	Leu	Ala	Leu	Ala	Pro	Gly	Arg	Leu	Ser	Pro
		675					680					685			
Arg	Ala	Ile	Phe	Gln	Glu	Thr	Lys	Asn	Arg	Ser	Leu	Ser	Arg	Val	Arg
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Val	Leu	Gly	Leu	Lys	Ala	His	Cys	Glu	Asn	Phe	Asn	Leu	Leu	Leu	Pro
705					710					715					720
Ser	Cys	Val	Glu	Asp	Ser	Val	Ile	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Phe
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Thr	Leu	Val	Gly	Lys	Pro	Leu	Leu	Ala	Phe	Arg	Asn	Leu	Arg	Pro	Met
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Lys	Asn	Cys	Gly	Ala	Asp	His	Ile	Cys	Gln	Asp	Asn	Leu	Gly	Ile	Ser
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785					790					795					800
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Thr	Phe	Asp	Val	Ser	Pro	Lys	Ala	Val	Gly	Leu	Asp	Arg	Leu	Leu	Leu
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675 680 685

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690 695 700

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915 920 925

Ser Ser His Gly Gly Arg Arg Gln Glu Ala Ala His Arg Tyr Arg Val
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Asn Asn Leu Ser Pro Leu Lys Leu Ala Val Arg Val Asn Phe Trp Val
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tcc	agc	ttg	cag	ttc	atc	cag	gca	atc	cct	gct	acc	atg	cca	gag	tgt	489
Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Ile	Pro	Ala	Thr	Met	Pro	Glu	Cys	
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cca	gga	caa	gag	atg	gac	att	gct	ttc	ctg	att	gat	ggc	tcc	ggc	agc	537
Pro	Gly	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	Gly	Ser	
				150					155					160		
att	gat	caa	agt	gac	ttt	acc	cag	atg	aag	gac	ttc	gtc	aaa	gct	ttg	585
Ile	Asp	Gln	Ser	Asp	Phe	Thr	Gln	Met	Lys	Asp	Phe	Val	Lys	Ala	Leu	
				165					170					175		
atg	ggc	cag	ttg	gcg	agc	acc	agc	acc	tgc	ttc	tcc	ctg	atg	caa	tac	633
Met	Gly	Gln	Leu	Ala	Ser	Thr	Ser	Thr	Ser	Phe	Ser	Leu	Met	Gln	Tyr	
		180					185					190				
tca	aac	atc	ctg	aag	act	cat	ttt	acc	ttc	acg	gaa	ttc	aag	agc	agc	681
Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe							

ctg agc cct cag agc ctg gtg gat gcc atc gtc cag ctc caa ggc ctg	729
Leu Ser Pro Gln Ser Leu Val Asp Ala Ile Val Gln Leu Gln Gly Leu	
215 220 225	
acg tac aca gcc tcg ggc atc cag aaa gtg gtg aaa gag cta ttt cat	777
Thr Tyr Thr Ala Ser Gly Ile Gln Lys Val Val Lys Glu Leu Phe His	
230 235 240	
agc aag aat ggg gcc cga aaa agt gcc aag aag ata cta att gtc atc	825
Ser Lys Asn Gly Ala Arg Lys Ser Ala Lys Lys Ile Leu Ile Val Ile	
245 250 255	
aca gat ggg cag aaa ttc aga gac ccc ctg gag tat aga cat gtc atc	873
Thr Asp Gly Gln Lys Phe Arg Asp Pro Leu Glu Tyr Arg His Val Ile	
260 265 270	
cct gaa gca gag aaa gct ggg atc att cgc tat gct ata ggg gtg gga	921
Pro Glu Ala Glu Lys Ala Gly Ile Ile Arg Tyr Ala Ile Gly Val Gly	
275 280 285 290	
gat gcc ttc cgg gaa ccc act gcc cta cag gag ctg aac acc att ggc	969
Asp Ala Phe Arg Glu Pro Thr Ala Leu Gln Glu Leu Asn Thr Ile Gly	
295 300 305	
tca gct ccc tcg cag gac cac gtg ttc aag gtg ggc aat ttt gta gca	1017
Ser Ala Pro Ser Gln Asp His Val Phe Lys Val Gly Asn Phe Val Ala	
310 315 320	
ctt cgc agc atc cag cgg caa att cag gag aaa atc ttt gcc att gaa	1065
Leu Arg Ser Ile Gln Arg Gln Ile Gln Glu Lys Ile Phe Ala Ile Glu	
325 330 335	
gga acc gaa tca agg tca agt agt tcc ttt cag cac gag atg tca caa	1113
Gly Thr Glu Ser Arg Ser Ser Ser Phe Gln His Glu Met Ser Gln	
340 345 350	
gaa ggt ttc agc tca gct ctc tca atg gat gga cca gtt ctg ggg gct	1161
Glu Gly Phe Ser Ser Ala Leu Ser Met Asp Gly Pro Val Leu Gly Ala	
355 360 365 370	
gtg gga ggc ttc agc tgg tct gga ggt gcc ttc ttg tac ccc tca aat	1209
Val Gly Gly Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro Ser Asn	
375 380 385	
atg aga tcc acc ttc atc aac atg tct cag gag aac gag gat atg agg	1257
Met Arg Ser Thr Phe Ile Asn Met Ser Gln Glu Asn Glu Asp Met Arg	
390 395 400	
gac gct tac ctg ggt tac tcc acc gca ctg gcc ttt tgg aag ggg gtc	1305
Asp Ala Tyr Leu Gly Tyr Ser Thr Ala Leu Ala Phe Trp Lys Gly Val	
405 410 415	
cac agc ctg atc ctg ggg gcc cct cgc cac cag cac acg ggg aag gtt	1353
His Ser Leu Ile Leu Gly Ala Pro Arg His Gln His Thr Gly Lys Val	
420 425 430	
gtc atc ttt acc cag gaa tcc agg cac tgg agg ccc aag tct gaa gtc	1401
Val Ile Phe Thr Gln Glu Ser Arg His Trp Arg Pro Lys Ser Glu Val	
435 440 445 450	

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aga Arg	ggg Gly	aca Thr	cag Gln	atc Ile 455	ggc Gly	tcc Ser	tac Tyr	ttt Phe	ggg Gly 460	gca Ala	tct Ser	ctc Leu	tgt Cys	tct Ser 465	gtg Val	1449
gac Asp	atg Met	gat Asp	aga Arg 470	gat Asp	ggc Gly	agc Ser	act Thr	gac Asp 475	ctg Leu	gtc Val	ctg Leu	att Ile	gga Gly 480	gtc Val	ccc Pro	1497
cat His	tac Tyr	tat Tyr 485	gag Glu	cac His	acc Thr	cga Arg	ggg Gly 490	ggg Gly	cag Gln	gtg Val	tcg Ser	gtg Val	tgc Cys 495	ccc Pro	atg Met	1545
cct Pro	ggg Gly 500	gtg Val	agg Arg	agc Ser	agg Arg	tgg Trp 505	cat His	tgt Cys	ggg Gly	acc Thr	acc Thr 510	ctc Leu	cat His	ggg Gly	gag Glu	1593
cag Gln 515	ggc Gly	cat His	cct Pro	tgg Trp	ggc Gly 520	cgc Arg	ttt Phe	ggg Gly	gcg Ala	gct Ala 525	ctg Leu	aca Thr	gtg Val	cta Leu	ggg Gly 530	1641
gac Asp	gtg Val	aat Asn	ggg Gly 535	gac Asp	agt Ser	ctg Leu	gcg Ala	gat Asp	gtg Val 540	gct Ala	att Ile	ggg Gly	gca Ala	ccc Pro 545	gga Gly	1689
gag Glu	gag Glu	gag Glu	aac Asn 550	aga Arg	ggg Gly	gct Ala	gtc Val	tac Tyr 555	ata Ile	ttt Phe	cat His	gga Gly 560	gcc Ala	tcg Ser	aga Arg	1737
cag Gln	gac Asp	atc Ile 565	gct Ala	ccc Pro	tcg Ser	cct Pro	agc Ser 570	cag Gln	cgg Arg	gtc Val	act Thr	ggc Gly 575	tcc Ser	cag Gln	ctc Leu	1785
ttc Phe	ctg Leu 580	agg Arg	ctc Leu	caa Gln	tat Tyr	ttt Phe 585	ggg Gly	cag Gln	tca Ser	tta Leu	agt Ser 590	ggg Gly	ggg Gly	cag Gln	gac Asp	1833
ctt Leu 595	aca Thr	cag Gln	gat Asp	ggc Gly	ctg Leu 600	gtg Val	gac Asp	ctg Leu	gcc Ala	gtg Val 605	gga Gly	gcc Ala	cag Gln	ggg Gly	cac His 610	1881
gtg Val	ctg Leu	ctg Leu	ctt Leu	agg Arg 615	agt Ser	ctg Leu	cct Pro	ttg Leu	ctg Leu 620	aaa Lys	gtg Val	ggg Gly	atc Ile	tcc Ser 625	att Ile	1929
aga Arg	ttt Phe	gcc Ala	ccc Pro 630	tca Ser	gag Glu	gtg Val	gca Ala	aag Lys 635	act Thr	gtg Val	tac Tyr	cag Gln	tgc Cys 640	tgg Trp	gga Gly	1977
agg Arg	act Thr	ccc Pro 645	act Thr	gtc Val	ctc Leu	gaa Glu	gct Ala 650	gga Gly	gag Glu	gcc Ala	acc Thr	gtc Val 655	tgt Cys	ctc Leu	act Thr	2025
gtc Val	cgc Arg	aaa Lys	ggg Gly	tca Ser	cct Pro	gac Asp 665	ctg Leu	tta Leu	ggg Gly	gat Asp	gtc Val 670	caa Gln	agc Ser	tct Ser	gtc Val	2073
agg Arg 675	tat Tyr	gat Asp	ctg Leu	gcg Ala	ttg Leu 680	gat Asp	ccg Pro	ggc Gly	cgt Arg	ctg Leu 685	att Ile	tct Ser	cgt Arg	gcc Ala	att Ile 690	2121

ttt gat gag acg aag aac tgc act ttg acc cga agg aag act ctg ggg	2169
Phe Asp Glu Thr Lys Asn Cys Thr Leu Thr Arg Arg Lys Thr Leu Gly	
695 700 705	
ctt ggt gat cac tgc gaa aca atg aag ctg ctt ttg cca gac tgt gtg	2217
Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp Cys Val	
710 715 720	
gag gat gca gtg acc cct atc atc ctg cgc ctt aac tta tcc ctg gca	2265
Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser Leu Ala	
725 730 735	
ggg gac tct gct cca tcc agg aac ctt cgt cct gtg ctg gct gtg ggc	2313
Gly Asp Ser Ala Pro Ser Arg Asn Leu Arg Pro Val Leu Ala Val Gly	
740 745 750	
tca caa gac cat gta aca gct tct ttc ccg ttt gag aag aac tgt gag	2361
Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn Cys Glu	
755 760 765 770	
ggg aac ctg ggc gtc agc ttc aac ttc tca ggc ctg cag gtc ttg gag	2409
Gly Asn Leu Gly Val Ser Phe Asn Phe Ser Gly Leu Gln Val Leu Glu	
775 780 785	
gta gga agc tcc cca gag ctc act gtg aca gta aca gtt tgg aat gag	2457
Val Gly Ser Ser Pro Glu Leu Thr Val Thr Val Thr Val Trp Asn Glu	
790 795 800	
ggt gag gac agc tat gga acc tta atc aag ttc tac tac cca gca gag	2505
Gly Glu Asp Ser Tyr Gly Thr Leu Ile Lys Phe Tyr Tyr Pro Ala Glu	
805 810 815	
cta tct tac cga cgg gtg aca aga gcc cag caa cct cat ccg tac cca	2553
Leu Ser Tyr Arg Arg Val Thr Arg Ala Gln Gln Pro His Pro Tyr Pro	
820 825 830	
cta cgc ctg gca tgt gag gct gag ccc acg ggc cag gag agc ctg agg	2601
Leu Arg Leu Ala Cys Glu Ala Glu Pro Thr Gly Gln Glu Ser Leu Arg	
835 840 845 850	
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Ser Ser Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu Gly Ala Lys	
855 860 865	
gcc acc ttc atg atc aca ttt gat gtc tcc tac aag gcc ttc ctg gga	2697
Ala Thr Phe Met Ile Thr Phe Asp Val Ser Tyr Lys Ala Phe Leu Gly	
870 875 880	
gac agg ttg ctt ctg agg gcc agc gca agc agt gag aat aat aag cct	2745
Asp Arg Leu Leu Leu Arg Ala Ser Ala Ser Ser Glu Asn Asn Lys Pro	
885 890 895	
gaa acc agc aag act gcc ttc cag ctg gag ctt ccg gtg aag tac acg	2793
Glu Thr Ser Lys Thr Ala Phe Gln Leu Glu Leu Pro Val Lys Tyr Thr	
900 905 910	
gtc tat acc gtg atc agt agg cag gaa gat tct acc aag cat ttc aac	2841
Val Tyr Thr Val Ile Ser Arg Gln Glu Asp Ser Thr Lys His Phe Asn	
915 920 925 930	
ttc tca tct tcc cac ggg gag aga cag aaa gag gcc gaa cat cga tat	2889

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<211> 1155

<213> Mus musculus

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Asp Ala Ala Ser Phe Gly Gln Thr Val Val Gln Phe Gly Gly Ser Arg
35 40 45

Leu Val Val Gly Ala Pro Leu Glu Ala Val Ala Val Asn Gln Thr Gly
50 55 60

Gln Ser Ser Asp Cys Pro Pro Ala Thr Gly Val Cys Gln Pro Ile Leu
65 70 75 80

Leu His Ile Pro Leu Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu
85 90 95

Val Ala Asp Thr Asn Asn Ser Gln Leu Leu Ala Cys Gly Pro Thr Ala
100 105 110

Gln Arg Ala Cys Ala Lys Asn Met Tyr Ala Lys Gly Ser Cys Leu Leu
115 120 125

Leu Gly Ser Ser Leu Gln Phe Ile Gln Ala Ile Pro Ala Thr Met Pro
130 135 140

Glu Cys Pro Gly Gln Glu Met Asp Ile Ala Phe Leu Ile Asp Gly Ser
145 150 155 160

Gly Ser Ile Asp Gln Ser Asp Phe Thr Gln Met Lys Asp Phe Val Lys
165 170 175

Ala Leu Met Gly Gln Leu Ala Ser Thr Ser Thr Ser Phe Ser Leu Met
180 185 190

Gln Tyr Ser Asn Ile Leu Lys Thr His Phe Thr Phe Thr Glu Phe Lys
195 200 205

Ser Ser Leu Ser Pro Gln Ser Leu Val Asp Ala Ile Val Gln Leu Gln
210 215 220

Gly Leu Thr Tyr Thr Ala Ser Gly Ile Gln Lys Val Val Lys Glu Leu
225 230 235 240

Phe His Ser Lys Asn Gly Ala Arg Lys Ser Ala Lys Lys Ile Leu Ile
245 250 255

Val Ile Thr Asp Gly Gln Lys Phe Arg Asp Pro Leu Glu Tyr Arg His
260 265 270

Val Ile Pro Glu Ala Glu Lys Ala Gly Ile Ile Arg Tyr Ala Ile Gly
275 280 285

Val Gly Asp Ala Phe Arg Glu Pro Thr Ala Leu Gln Glu Leu Asn Thr
290 295 300

Ile 305	Gly	Ser	Ala	Pro	Ser 310	Gln	Asp	His	Val	Phe 315	Lys	Val	Gly	Asn	Phe 320
Val	Ala	Leu	Arg	Ser 325	Ile	Gln	Arg	Gln	Ile 330	Gln	Glu	Lys	Ile	Phe 335	Ala
Ile	Glu	Gly	Thr 340	Glu	Ser	Arg	Ser	Ser 345	Ser	Ser	Phe	Gln	His 350	Glu	Met
Ser	Gln	Glu	Gly 355	Phe	Ser	Ser	Ala 360	Leu	Ser	Met	Asp	Gly 365	Pro	Val	Leu
Gly	Ala	Val	Gly 370	Gly	Phe	Ser 375	Trp	Ser	Gly	Gly 380	Ala	Phe	Leu	Tyr	Pro
Ser 385	Asn	Met	Arg	Ser	Thr 390	Phe	Ile	Asn	Met	Ser 395	Gln	Glu	Asn	Glu	Asp 400
Met	Arg	Asp	Ala	Tyr 405	Leu	Gly	Tyr	Ser	Thr 410	Ala	Leu	Ala	Phe	Trp 415	Lys
Gly	Val	His	Ser 420	Leu	Ile	Leu	Gly	Ala 425	Pro	Arg	His	Gln	His 430	Thr	Gly
Lys	Val	Val 435	Ile	Phe	Thr	Gln	Glu 440	Ser	Arg	His	Trp	Arg 445	Pro	Lys	Ser
Glu	Val	Arg	Gly 450	Thr	Gln	Ile 455	Gly	Ser	Tyr	Phe	Gly 460	Ala	Ser	Leu	Cys
Ser 465	Val	Asp	Met	Asp	Arg 470	Asp	Gly	Ser	Thr	Asp 475	Leu	Val	Leu	Ile	Gly 480
Val	Pro	His	Tyr	Tyr 485	Glu	His	Thr	Arg	Gly 490	Gly	Gln	Val	Ser	Val 495	Cys
Pro	Met	Pro	Gly 500	Val	Arg	Ser	Arg	Trp 505	His	Cys	Gly	Thr	Thr 510	Leu	His
Gly	Glu	Gln	Gly 515	His	Pro	Trp	Gly 520	Arg	Phe	Gly	Ala	Ala 525	Leu	Thr	Val
Leu	Gly 530	Asp	Val	Asn	Gly	Asp 535	Ser	Leu	Ala	Asp	Val 540	Ala	Ile	Gly	Ala
Pro 545	Gly	Glu	Glu	Glu	Asn 550	Arg	Gly	Ala	Val	Tyr 555	Ile	Phe	His	Gly	Ala 560
Ser	Arg	Gln	Asp	Ile 565	Ala	Pro	Ser	Pro	Ser 570	Gln	Arg	Val	Thr	Gly 575	Ser
Gln	Leu	Phe	Leu 580	Arg	Leu	Gln	Tyr	Phe 585	Gly	Gln	Ser	Leu	Ser 590	Gly	Gly
Gln	Asp	Leu 595	Thr	Gln	Asp	Gly	Leu 600	Val	Asp	Leu	Ala	Val 605	Gly	Ala	Gln
Gly	His 610	Val	Leu	Leu	Leu	Arg 615	Ser	Leu	Pro	Leu	Leu 620	Lys	Val	Gly	Ile

Ser	Ile	Arg	Phe	Ala	Pro	Ser	Glu	Val	Ala	Lys	Thr	Val	Tyr	Gln	Cys
625					630					635					640
Trp	Gly	Arg	Thr	Pro	Thr	Val	Leu	Glu	Ala	Gly	Glu	Ala	Thr	Val	Cys
				645					650					655	
Leu	Thr	Val	Arg	Lys	Gly	Ser	Pro	Asp	Leu	Leu	Gly	Asp	Val	Gln	Ser
			660					665					670		
Ser	Val	Arg	Tyr	Asp	Leu	Ala	Leu	Asp	Pro	Gly	Arg	Leu	Ile	Ser	Arg
		675					680					685			
Ala	Ile	Phe	Asp	Glu	Thr	Lys	Asn	Cys	Thr	Leu	Thr	Arg	Arg	Lys	Thr
	690					695					700				
Leu	Gly	Leu	Gly	Asp	His	Cys	Glu	Thr	Met	Lys	Leu	Leu	Leu	Pro	Asp
705					710					715					720
Cys	Val	Glu	Asp	Ala	Val	Thr	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Leu	Ser
				725					730					735	
Leu	Ala	Gly	Asp	Ser	Ala	Pro	Ser	Arg	Asn	Leu	Arg	Pro	Val	Leu	Ala
			740					745					750		
Val	Gly	Ser	Gln	Asp	His	Val	Thr	Ala	Ser	Phe	Pro	Phe	Glu	Lys	Asn
		755					760					765			
Cys	Glu	Gly	Asn	Leu	Gly	Val	Ser	Phe	Asn	Phe	Ser	Gly	Leu	Gln	Val
	770					775					780				
Leu	Glu	Val	Gly	Ser	Ser	Pro	Glu	Leu	Thr	Val	Thr	Val	Thr	Val	Trp
785					790					795					800
Asn	Glu	Gly	Glu	Asp	Ser	Tyr	Gly	Thr	Leu	Ile	Lys	Phe	Tyr	Tyr	Pro
				805					810					815	
Ala	Glu	Leu	Ser	Tyr	Arg	Arg	Val	Thr	Arg	Ala	Gln	Gln	Pro	His	Pro
			820					825					830		
Tyr	Pro	Leu	Arg	Leu	Ala	Cys	Glu	Ala	Glu	Pro	Thr	Gly	Gln	Glu	Ser
		835					840					845			
Leu	Arg	Ser	Ser	Ser	Cys	Ser	Ile	Asn	His	Pro	Ile	Phe	Arg	Glu	Gly
	850					855					860				
Ala	Lys	Ala	Thr	Phe	Met	Ile	Thr	Phe	Asp	Val	Ser	Tyr	Lys	Ala	Phe
865					870					875					880
Leu	Gly	Asp	Arg	Leu	Leu	Leu	Arg	Ala	Ser	Ala	Ser	Ser	Glu	Asn	Asn
				885				890						895	
Lys	Pro	Glu	Thr	Ser	Lys	Thr	Ala	Phe	Gln	Leu	Glu	Leu	Pro	Val	Lys
			900					905					910		
Tyr	Thr	Val	Tyr	Thr	Val	Ile	Ser	Arg	Gln	Glu	Asp	Ser	Thr	Lys	His
		915					920					925			
Phe	Asn	Phe	Ser	Ser	Ser	His	Gly	Glu	Arg	Gln	Lys	Glu	Ala	Glu	His
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Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu Thr Leu Ala Ile Ser Val
945 950 955 960

Asn Phe Trp Val Pro Ile Leu Leu Asn Gly Val Ala Val Trp Asp Val
965 970 975

Thr Leu Arg Ser Pro Ala Gln Gly Val Ser Cys Val Ser Gln Arg Glu
980 985 990

Pro Pro Gln His Ser Asp Leu Leu Thr Gln Ile Gln Gly Arg Ser Val
995 1000 1005

Leu Asp Cys Ala Ile Ala Asp Cys Leu His Leu Arg Cys Asp Ile Pro
1010 1015 1020

Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe Ile Leu Lys Gly Asn Leu
1025 1030 1035 1040

Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln Lys Lys Val Leu Leu Leu
1045 1050 1055

Ser Glu Ala Glu Ile Thr Phe Asn Thr Ser Val Tyr Ser Gln Leu Pro
1060 1065 1070

Gly Gln Glu Ala Phe Leu Arg Ala Gln Val Ser Thr Met Leu Glu Glu
1075 1080 1085

Tyr Val Val Tyr Glu Pro Val Phe Leu Met Val Phe Ser Ser Val Gly
1090 1095 1100

Gly Leu Leu Leu Leu Ala Leu Ile Thr Val Ala Leu Tyr Lys Leu Gly
1105 1110 1115 1120

Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu Asp Leu Pro Ser Ala Asp
1125 1130 1135

Pro Asp Pro Ala Gly Gln Ala Asp Ser Asn His Glu Thr Pro Pro His
1140 1145 1150

Leu Thr Ser
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<210> 47
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

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49

<210> 48
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 48
gctggacgat ggcattccac 19

<210> 49
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 49
gtagagttac ggatccggca ccat 24

<210> 50
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 50
gcagccagct tcggacagac 20

<210> 51
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 51
ccatgtccac agaacagaga g 21

<210> 52
<211> 3803
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (1)..(3483)

<220>
<223> Description of Artificial Sequence: primer

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Met Val Arg Gly Val Val Ile Leu Leu Cys Gly Trp Ala Leu Ala Ser
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tgt cat ggg tct aac ctg gat gtg gag aag ccc gtc gtg ttc aaa gag 96
Cys His Gly Ser Asn Leu Asp Val Glu Lys Pro Val Val Phe Lys Glu
20 25 30

gat gca gcc agc ttc gga cag act gtg gtg cag ttt ggt gga tct cga	144
Asp Ala Ala Ser Phe Gly Gln Thr Val Val Gln Phe Gly Gly Ser Arg	
35 40 45	
ctc gtg gtg gga gcc cct ctg gag gcg gtg gca gtc aac caa aca gga	192
Leu Val Val Gly Ala Pro Leu Glu Ala Val Ala Val Asn Gln Thr Gly	
50 55 60	
cag tcg tct gac tgt ccg cct gcc act ggc gtg tgc cag ccc atc tta	240
Gln Ser Ser Asp Cys Pro Pro Ala Thr Gly Val Cys Gln Pro Ile Leu	
65 70 75 80	
ctg cac att ccc cta gag gca gtg aac atg tcc ctg ggc ctg tct ctg	288
Leu His Ile Pro Leu Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu	
85 90 95	
gtg gct gac acc aat aac tcc cag ttg ctg gct tgt ggt cca act gca	336
Val Ala Asp Thr Asn Asn Ser Gln Leu Leu Ala Cys Gly Pro Thr Ala	
100 105 110	
cag aga gct tgt gca aag aac atg tat gca aaa ggt tcc tgc ctc ctt	384
Gln Arg Ala Cys Ala Lys Asn Met Tyr Ala Lys Gly Ser Cys Leu Leu	
115 120 125	
ctg ggc tcc agc ttg cag ttc atc cag gca atc cct gct acc atg cca	432
Leu Gly Ser Ser Leu Gln Phe Ile Gln Ala Ile Pro Ala Thr Met Pro	
130 135 140	
gag tgt cca gga caa gag atg gac att gct ttc ctg att gat ggc tcc	480
Glu Cys Pro Gly Gln Glu Met Asp Ile Ala Phe Leu Ile Asp Gly Ser	
145 150 155 160	
ggc agc att gat caa agt gac ttt acc cag atg aag gac ttc gtc aaa	528
Gly Ser Ile Asp Gln Ser Asp Phe Thr Gln Met Lys Asp Phe Val Lys	
165 170 175	
gct ttg atg ggc cag ttg gcg agc acc agc acc tcg ttc tcc ctg atg	576
Ala Leu Met Gly Gln Leu Ala Ser Thr Ser Thr Ser Phe Ser Leu Met	
180 185 190	
caa tac tca aac atc ctg aag act cat ttt acc ttc acg gaa ttc aag	624
Gln Tyr Ser Asn Ile Leu Lys Thr His Phe Thr Phe Thr Glu Phe Lys	
195 200 205	
agc agc ctg agc cct cag agc ctg gtg gat gcc atc gtc cag ctc caa	672
Ser Ser Leu Ser Pro Gln Ser Leu Val Asp Ala Ile Val Gln Leu Gln	
210 215 220	
ggc ctg acg tac aca gcc tcg ggc atc cag aaa gtg gtg aaa gag cta	720
Gly Leu Thr Tyr Thr Ala Ser Gly Ile Gln Lys Val Val Lys Glu Leu	
225 230 235 240	
ttt cat agc aag aat ggg gcc cga aaa agt gcc aag aag ata cta att	768
Phe His Ser Lys Asn Gly Ala Arg Lys Ser Ala Lys Lys Ile Leu Ile	
245 250 255	
gtc atc aca gat ggg cag aaa ttc aga gac ccc ctg gag tat aga cat	816
Val Ile Thr Asp Gly Gln Lys Phe Arg Asp Pro Leu Glu Tyr Arg His	
260 265 270	

gtc Val	atc Ile	cct Pro 275	gaa Glu	gca Ala	gag Glu	aaa Lys	gct Ala 280	ggg Gly	atc Ile	att Ile	cgc Arg	tat Tyr 285	gct Ala	ata Ile	ggg Gly	864
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Gln	Tyr	Ser 195	Asn	Ile	Leu	Lys	Thr 200	His	Phe	Thr	Phe	Thr 205	Glu	Phe	Lys
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Ser Val Arg Tyr Asp Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg
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Leu Gly Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp
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Cys Val Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser
725 730 735

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Val Gly Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn
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Cys Lys Gln Glu Leu Leu Cys Glu Gly Asn Leu Gly Val Ser Phe Asn
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Phe Ser Gly Leu Gln Val Leu Glu Val Gly Ser Ser Pro Glu Leu Thr
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Val Thr Val Thr Val Trp Asn Glu Gly Glu Asp Ser Tyr Gly Thr Leu
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Ile Lys Phe Tyr Tyr Pro Ala Glu Leu Ser Tyr Arg Arg Val Thr Arg
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Pro Thr Gly Gln Glu Ser Leu Arg Ser Ser Ser Cys Ser Ile Asn His
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Pro Ile Phe Arg Glu Gly Ala Lys Ala Thr Phe Met Ile Thr Phe Asp
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Ala Ser Ser Glu Asn Asn Lys Pro Glu Thr Ser Lys Thr Ala Phe Gln
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Leu Glu Leu Pro Val Lys Tyr Thr Val Tyr Thr Val Ile Ser Arg Gln
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Glu Asp Ser Thr Lys His Phe Asn Phe Ser Ser Ser His Gly Glu Arg
930 935 940

Gln Lys Glu Ala Glu His Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu
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Thr Leu Ala Ile Ser Val Asn Phe Trp Val Pro Ile Leu Leu Asn Gly
965 970 975

Val Ala Val Trp Asp Val Thr Leu Arg Ser Pro Ala Gln Gly Val Ser
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Cys Val Ser Gln Arg Glu Pro Pro Gln His Ser Asp Leu Leu Thr Gln
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FO9290" E46T6860

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Ile Gln Arg Gln Leu Gln Glu Lys Ile Phe Ala Ile Glu Gly Thr Gln	
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Ser Arg Ser Ser Ser Phe Gln His Glu Met Ser Gln Glu Gly Phe	
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Ser Ser Ala Leu Thr Ser Asp Gly Pro Val Leu Gly Ala Val Gly Ser	
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Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro Pro Asn Thr Arg Pro	
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acc ttt atc aac atg tct cag gag aat gtg gac atg aga gac tcc tac	1254
Thr Phe Ile Asn Met Ser Gln Glu Asn Val Asp Met Arg Asp Ser Tyr	
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Leu Gly Tyr Ser Thr Ala Val Ala Phe Trp Lys Gly Val His Ser Leu	
410 415 420	
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Ile Leu Gly Ala Pro Arg His Gln His Thr Gly Lys Val Val Ile Phe	
425 430 435	
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Thr Gln Glu Ala Arg His Trp Arg Pro Lys Ser Glu Val Arg Gly Thr	
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Gln Ile Gly Ser Tyr Phe Gly Ala Ser Leu Cys Ser Val Asp Val Asp	
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Arg Asp Gly Ser Xaa Asp Leu Val Leu Ile Gly Ala Pro His Tyr Tyr	
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Glu Gln Thr Arg Gly Gly Gln Val Ser Val Phe Pro Val Pro Gly Val	
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T03290 24646350

agg Arg	ggc Gly	agg Arg	tgg Trp 505	cag Gln	tgt Cys	gag Glu	gcc Ala	acc Thr 510	ctc Leu	cac His	ggg Gly	gag Glu	cag Gln 515	ggc Gly	cat His	1590
cct Pro	tgg Trp	ggc Gly 520	cgc Arg	ttt Phe	ggg Gly	gtg Val	gct Ala 525	ctg Leu	aca Thr	gtg Val	ctg Leu	ggg Gly 530	gac Asp	gta Val	aac Asn	1638
ggg Gly	gac Asp 535	aat Asn	ctg Leu	gca Ala	gac Asp	gtg Val 540	gct Ala	att Ile	ggc Gly	gcc Ala	cct Pro 545	gga Gly	gag Glu	gag Glu	gag Glu	1686
agc Ser 550	aga Arg	ggc Gly	gct Ala	gtc Val	tac Tyr 555	ata Ile	ttt Phe	cat His	gga Gly	gcc Ala 560	tcg Ser	aga Arg	ctg Leu	gag Glu	atc Ile 565	1734
atg Met	ccc Pro	tca Ser	ccc Pro	agc Ser 570	cag Gln	cgg Arg	gtc Val	act Thr	ggc Gly 575	tcc Ser	cag Gln	ctc Leu	tcc Ser	ctg Leu 580	aga Arg	1782
ctg Leu	cag Gln	tat Tyr	ttt Phe 585	ggg Gly	cag Gln	tca Ser	ttg Leu	agt Ser 590	ggg Gly	ggc Gly	cag Gln	gac Asp	ctt Leu 595	aca Thr	cag Gln	1830
gat Asp	ggc Gly	ctg Leu 600	gtg Val	gac Asp	ctg Leu	gcc Ala	gtg Val 605	gga Gly	gcc Ala	cag Gln	ggg Gly	cac His 610	gta Val	ctg Leu	ctg Leu	1878
ctc Leu	agg Arg 615	agt Ser	ctg Leu	cct Pro	ctg Leu	ctg Leu 620	aaa Lys	gtg Val	gag Glu	ctc Leu	tcc Ser 625	ata Ile	aga Arg	ttc Phe	gcc Ala	1926
ccc Pro 630	atg Met	gag Glu	gtg Val	gca Ala	aag Lys 635	gct Ala	gtg Val	tac Tyr	cag Gln	tgc Cys 640	tgg Trp	gaa Glu	agg Arg	act Thr	ccc Pro 645	1974
act Thr	gtc Val	ctc Leu	gaa Glu	gct Ala 650	gga Gly	gag Glu	gcc Ala	act Thr	gtc Val 655	tgt Cys	ctc Leu	act Thr	gtc Val	cac His 660	aaa Lys	2022
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ctg Leu	gcg Ala	tta Leu 680	gat Asp	ccg Pro	ggc Gly	cgc Arg	ctg Leu 685	att Ile	tct Ser	cgt Arg	gcc Ala	att Ile 690	ttt Phe	gat Asp	gag Glu	2118
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cac His 710	tgc Cys	gaa Glu	aca Thr	gtg Val	aag Lys 715	ctg Leu	ctt Leu	ttg Leu	ccg Pro	gac Asp 720	tgt Cys	gtg Val	gaa Glu	gat Asp	gca Ala 725	2214
gtg Val	agc Ser	cct Pro	atc Ile	atc Ile 730	ctg Leu	cgc Arg	ctc Leu	aac Asn	ttt Phe 735	tcc Ser	ctg Leu	gtg Val	aga Arg	gac Asp 740	tct Ser	2262

gct tca ccc agg aac ctg cat cct gtg ctg gct gtg ggc tca caa gac Ala Ser Pro Arg Asn Leu His Pro Val Leu Ala Val Gly Ser Gln Asp 745 750 755	2310
cac ata act gct tct ctg ccg ttt gag aag aac tgt aag caa gaa ctc His Ile Thr Ala Ser Leu Pro Phe Glu Lys Asn Cys Lys Gln Glu Leu 760 765 770	2358
ctg tgt gag ggg gac ctg ggc atc agc ttt aac ttc tca ggc ctg cag Leu Cys Glu Gly Asp Leu Gly Ile Ser Phe Asn Phe Ser Gly Leu Gln 775 780 785	2406
gtc ttg gtg gtg gga ggc tcc cca gag ctc act gtg aca gtc act gtg Val Leu Val Val Gly Gly Ser Pro Glu Leu Thr Val Thr Val Thr Val 790 795 800 805	2454
tgg aat gag ggt gag gac agc tat gga act tta gtc aag ttc tac tac Trp Asn Glu Gly Glu Asp Ser Tyr Gly Thr Leu Val Lys Phe Tyr Tyr 810 815 820	2502
cca gca ggg cta tct tac cga cgg gta aca ggg act cag caa cct cat Pro Ala Gly Leu Ser Tyr Arg Arg Val Thr Gly Thr Gln Gln Pro His 825 830 835	2550
cag tac cca cta cgc ttg gcc tgt gag gct gag ccc gct gcc cag gag Gln Tyr Pro Leu Arg Leu Ala Cys Glu Ala Glu Pro Ala Ala Gln Glu 840 845 850	2598
gac ctg agg agc agc agc tgt agc att aat cac ccc atc ttc cga gaa Asp Leu Arg Ser Ser Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu 855 860 865	2646
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aat aag cct gat acc aac aag act gcc ttc cag ctg gag ctc cca gtg Asn Lys Pro Asp Thr Asn Lys Thr Ala Phe Gln Leu Glu Leu Pro Val 905 910 915	2790
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cat gtc aac ttt tca tct tcc cac ggg ggg aga agg caa gaa gcc gca His Val Asn Phe Ser Ser Ser His Gly Gly Arg Arg Gln Glu Ala Ala 935 940 945	2886
cat cgc tat cgt gtg aat aac ctg agt cca ctg aag ctg gcc gtc aga His Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu Lys Leu Ala Val Arg 950 955 960 965	2934
gtt aac ttc tgg gtc cct gtc ctt ctg aac ggt gtg gct gtg tgg gac Val Asn Phe Trp Val Pro Val Leu Leu Asn Gly Val Ala Val Trp Asp 970 975 980	2982

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<211> 1161
<212> PRT
<213> Rattus rattus
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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg	
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Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly	
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Arg	Leu	Tyr	Asp	Cys	Ala	Pro	Ala	Thr	Gly	Met	Cys	Gln	Pro	Ile	Val	
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Leu	Arg	Ser	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu	
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Val	Thr	Ala	Thr	Asn	Asn	Ala	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala	
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Gln	Arg	Ala	Cys	Val	Lys	Asn	Met	Tyr	Ala	Lys	Gly	Ser	Cys	Leu	Leu	
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Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Val	Pro	Ala	Ser	Met	Pro	
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Glu	Cys	Pro	Arg	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	
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Gly	Ser	Ile	Asn	Gln	Arg	Asp	Phe	Ala	Gln	Met	Lys	Asp	Phe	Val	Lys	
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Ala	Leu	Met	Gly	Glu	Phe	Ala	Ser	Thr	Ser	Thr	Leu	Phe	Ser	Leu	Met	
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Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys	
			195						200						205	
Asn	Ile	Leu	Asp	Pro	Gln	Ser	Leu	Val	Asp	Pro	Ile	Val	Gln	Leu	Gln	
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Gly	Leu	Thr	Tyr	Thr	Ala	Thr	Gly	Ile	Arg	Thr	Val	Met	Glu	Glu	Leu	
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Phe	His	Ser	Lys	Asn	Gly	Ser	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Leu	
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Val	Ile	Thr	Asp	Gly	Gln	Lys	Tyr	Arg	Asp	Pro	Leu	Glu	Tyr	Ser	Asp	
			260						265						270	
Val	Ile	Pro	Ala	Ala	Asp	Lys	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly	
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Val	Gly	Asp	Ala	Phe	Gln	Glu	Pro	Thr	Ala	Leu	Lys	Glu	Leu	Asn	Thr	
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Ile	Gly	Ser	Ala	Pro	Pro	Gln	Asp	His	Val	Phe	Lys	Val	Gly	Asn	Phe	
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Ala	Ala	Leu	Arg	Ser	Ile	Gln	Arg	Gln	Leu	Gln	Glu	Lys	Ile	Phe	Ala	
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Pro	Asn	Thr	Arg	Pro	Thr	Phe	Ile	Asn	Met	Ser	Gln	Glu	Asn	Val	Asp
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Met	Arg	Asp	Ser	Tyr	Leu	Gly	Tyr	Ser	Thr	Ala	Val	Ala	Phe	Trp	Lys
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Gly	Val	His	Ser	Leu	Ile	Leu	Gly	Ala	Pro	Arg	His	Gln	His	Thr	Gly
			420					425					430		
Lys	Val	Val	Ile	Phe	Thr	Gln	Glu	Ala	Arg	His	Trp	Arg	Pro	Lys	Ser
		435					440					445			
Glu	Val	Arg	Gly	Thr	Gln	Ile	Gly	Ser	Tyr	Phe	Gly	Ala	Ser	Leu	Cys
		450				455					460				
Ser	Val	Asp	Val	Asp	Arg	Asp	Gly	Ser	Xaa	Asp	Leu	Val	Leu	Ile	Gly
465					470					475					480
Ala	Pro	His	Tyr	Tyr	Glu	Gln	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Phe
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Pro	Val	Pro	Gly	Val	Arg	Gly	Arg	Trp	Gln	Cys	Glu	Ala	Thr	Leu	His
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Gly	Glu	Gln	Gly	His	Pro	Trp	Gly	Arg	Phe	Gly	Val	Ala	Leu	Thr	Val
		515					520					525			
Leu	Gly	Asp	Val	Asn	Gly	Asp	Asn	Leu	Ala	Asp	Val	Ala	Ile	Gly	Ala
	530					535					540				
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Ser	Arg	Leu	Glu	Ile	Met	Pro	Ser	Pro	Ser	Gln	Arg	Val	Thr	Gly	Ser
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Gln	Leu	Ser	Leu	Arg	Leu	Gln	Tyr	Phe	Gly	Gln	Ser	Leu	Ser	Gly	Gly
			580					585					590		
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		595					600					605			
Gly	His	Val	Leu	Leu	Leu	Arg	Ser	Leu	Pro	Leu	Leu	Lys	Val	Glu	Leu
	610					615					620				
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625					630					635					640
Trp	Glu	Arg	Thr	Pro	Thr	Val	Leu	Glu	Ala	Gly	Glu	Ala	Thr	Val	Cys
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Leu	Thr	Val	His	Lys	Gly	Ser	Pro	Asp	Leu	Leu	Gly	Asn	Val	Gln	Gly
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Ser	Val	Arg	Tyr	Asp	Leu	Ala	Leu	Asp	Pro	Gly	Arg	Leu	Ile	Ser	Arg
		675					680					685			
Ala	Ile	Phe	Asp	Glu	Thr	Lys	Asn	Cys	Thr	Leu	Thr	Gly	Arg	Lys	Thr
	690					695					700				
Leu	Gly	Leu	Gly	Asp	His	Cys	Glu	Thr	Val	Lys	Leu	Leu	Leu	Pro	Asp
705					710					715					720
Cys	Val	Glu	Asp	Ala	Val	Ser	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Phe	Ser
				725					730					735	
Leu	Val	Arg	Asp	Ser	Ala	Ser	Pro	Arg	Asn	Leu	His	Pro	Val	Leu	Ala
			740					745					750		
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		755					760					765			
Cys	Lys	Gln	Glu	Leu	Leu	Cys	Glu	Gly	Asp	Leu	Gly	Ile	Ser	Phe	Asn
	770					775					780				
Phe	Ser	Gly	Leu	Gln	Val	Leu	Val	Val	Gly	Gly	Ser	Pro	Glu	Leu	Thr
785					790					795					800
Val	Thr	Val	Thr	Val	Trp	Asn	Glu	Gly	Glu	Asp	Ser	Tyr	Gly	Thr	Leu
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Val	Lys	Phe	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	Tyr	Arg	Arg	Val	Thr	Gly
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Thr	Gln	Gln	Pro	His	Gln	Tyr	Pro	Leu	Arg	Leu	Ala	Cys	Glu	Ala	Glu
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Pro	Ala	Ala	Gln	Glu	Asp	Leu	Arg	Ser	Ser	Ser	Cys	Ser	Ile	Asn	His
	850					855					860				
Pro	Ile	Phe	Arg	Glu	Gly	Ala	Lys	Thr	Thr	Phe	Met	Ile	Thr	Phe	Asp
865					870					875					880
Val	Ser	Tyr	Lys	Ala	Phe	Leu	Gly	Asp	Arg	Leu	Leu	Leu	Arg	Ala	Lys
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Ala	Ser	Ser	Glu	Asn	Asn	Lys	Pro	Asp	Thr	Asn	Lys	Thr	Ala	Phe	Gln
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Leu	Glu	Leu	Pro	Val	Lys	Tyr	Thr	Val	Tyr	Thr	Leu	Ile	Ser	Arg	Gln
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Glu	Asp	Ser	Thr	Asn	His	Val	Asn	Phe	Ser	Ser	Ser	His	Gly	Gly	Arg
	930					935					940				
Arg	Gln	Glu	Ala	Ala	His	Arg	Tyr	Arg	Val	Asn	Asn	Leu	Ser	Pro	Leu
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Lys	Leu	Ala	Val	Arg	Val	Asn	Phe	Trp	Val	Pro	Val	Leu	Leu	Asn	Gly
				965					970					975	

Val Ala Val Trp Asp Val Thr Leu Ser Ser Pro Ala Gln Gly Val Ser
 980 985 990

Cys Val Ser Gln Met Lys Pro Pro Gln Asn Pro Asp Phe Leu Thr Gln
 995 1000 1005

Ile Gln Arg Arg Ser Val Leu Asp Cys Ser Ile Ala Asp Cys Leu His
 1010 1015 1020

Phe Arg Cys Asp Ile Pro Ser Leu Asp Ile Gln Asp Glu Leu Asp Phe
 025 1030 1035 1040

Ile Leu Arg Gly Asn Leu Ser Phe Gly Trp Val Ser Gln Thr Leu Gln
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Glu Lys Val Leu Leu Val Ser Glu Ala Glu Ile Thr Phe Asp Thr Ser
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Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe Leu Arg Ala Gln Val
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Glu Thr Thr Leu Glu Glu Tyr Val Val Tyr Glu Pro Ile Phe Leu Val
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Ala Gly Ser Ser Val Gly Gly Leu Leu Leu Leu Ala Leu Ile Thr Val
 105 1110 1115 1120

Val Leu Tyr Lys Leu Gly Phe Xaa Lys Arg Gln Tyr Lys Glu Met Leu
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<220>
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<212> DNA
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<220>
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<210> 72
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<220>
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09290-2451550

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<210> 76
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<220>
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<400> 76
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<400> 77
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109290" 646T6360

<210> 84

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ccc	aac	cat	tcc	cag	ctg	ctg	gct	tgt	ggc	ccg	acc	gtg	cat	aga	gcc	
Pro	Asn	His	Ser	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Val	His	Arg	Ala	
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tgc	ggg	gag	gac	gtg	tac	gcc	cag	ggc	ttc	tgt	gtg	ctg	ctg	gat	gcc	
Cys	Gly	Glu	Asp	Val	Tyr	Ala	Gln	Gly	Phe	Cys	Val	Leu	Leu	Asp	Ala	
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cac	gca	cag	ccc	atc	ggg	act	gtg	cca	gct	gcc	ctg	ccc	gag	tgc	cca	
His	Ala	Gln	Pro	Ile	Gly	Thr	Val	Pro	Ala	Ala	Leu	Pro	Glu	Cys	Pro	
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gat	caa	gag	atg	gac	att	gtc	ttc	ctg	att	gac	ggc	tct	ggc	agc	att	
Asp	Gln	Glu	Met	Asp	Ile	Val	Phe	Leu	Ile	Asp	Gly	Ser	Gly	Ser	Ile	
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agc	tca	aat	gac	ttc	cgc	aag	atg	aag	gac	ttt	gtc	aga	gct	gtg	atg	
Ser	Ser	Asn	Asp	Phe	Arg	Lys	Met	Lys	Asp	Phe	Val	Arg	Ala	Val	Met	
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180 185 190

Asn Val Leu Val Thr His Phe Thr Phe Ser Ser Phe Arg Asn Ser Ser
195 200 205

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210 215 220

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

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<213> Homo sapiens

<400> 96

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Leu Gly Glu Glu Gly Val Gly Val Gly Thr Gly Gly Ser
405 410

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<210> 102
<211> 1484
<212> DNA
<213> rabbit
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<220>
<221> CDS
<222> (1)..(1482)
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Asp	Val	Gln	Ser	Ser	Ile	Ser	Tyr	Asp	Leu	Ala	Leu	Asp	Pro	Gly	Arg		
1				5					10					15			
ctg	gtc	tct	cgg	gcc	att	ttt	caa	gag	acc	cag	aac	cag	act	tta	act		96
Leu	Val	Ser	Arg	Ala	Ile	Phe	Gln	Glu	Thr	Gln	Asn	Gln	Thr	Leu	Thr		
			20					25					30				
cga	agg	aag	acc	ctg	ggg	ctg	ggg	cgt	cac	tgt	gaa	acc	atg	agg	cta		144
Arg	Arg	Lys	Thr	Leu	Gly	Leu	Gly	Arg	His	Cys	Glu	Thr	Met	Arg	Leu		
		35					40					45					
ctt	ttg	cca	gac	tgc	gta	gag	gac	gtg	gtg	aac	ccc	atc	gtc	ctg	cac		192
Leu	Leu	Pro	Asp	Cys	Val	Glu	Asp	Val	Val	Asn	Pro	Ile	Val	Leu	His		
	50					55					60						
ctc	aac	ttc	tcc	ctg	gag	gga	cag	cca	atc	ctc	tca	tcc	cag	aat	ctg		240
Leu	Asn	Phe	Ser	Leu	Glu	Gly	Gln	Pro	Ile	Leu	Ser	Ser	Gln	Asn	Leu		
65					70					75					80		
cgc	cct	gtg	ctg	gcc	acg	ggc	tcg	cag	gac	cac	ttc	att	gcc	tcc	ctc		288
Arg	Pro	Val	Leu	Ala	Thr	Gly	Ser	Gln	Asp	His	Phe	Ile	Ala	Ser	Leu		
				85					90					95			
ccc	ttt	gag	aag	aac	tgc	gga	caa	gat	cgc	ctg	tgt	gag	ggg	gac	ctg		336
Pro	Phe	Glu	Lys	Asn	Cys	Gly	Gln	Asp	Arg	Leu	Cys	Glu	Gly	Asp	Leu		
			100					105					110				
agc	atc	agc	ttc	aac	ttc	tcg	ggc	ttg	aat	acc	ctg	ctg	gtg	ggg	ctc		384
Ser	Ile	Ser	Phe	Asn	Phe	Ser	Gly	Leu	Asn	Thr	Leu	Leu	Val	Gly	Leu		
		115					120					125					
tcc	ctg	gag	ctc	aca	gtg	aca	gtg	acc	gtg	cgg	aat	gag	ggc	gag	gac		432
Ser	Leu	Glu	Leu	Thr	Val	Thr	Val	Thr	Val	Arg	Asn	Glu	Gly	Glu	Asp		
	130					135					140						
tcc	tat	ggg	acc	gcc	atc	acc	ctc	tac	tac	cca	gca	ggg	cta	tcc	tac		480
Ser	Tyr	Gly	Thr	Ala	Ile	Thr	Leu	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	Tyr		
145					150					155					160		
agg	cgg	gtg	tcg	ggc	cag	aca	caa	ccc	tgg	cag	cgc	ccc	ctg	cac	ctc		528
Arg	Arg	Val	Ser	Gly	Gln	Thr	Gln	Pro	Trp	Gln	Arg	Pro	Leu	His	Leu		
				165					170					175			

gca Ala	tgt Cys	gag Glu	gct Ala 180	gta Val	cct Pro	acc Thr	gag Glu	agc Ser 185	gag Glu	ggc Gly	ttg Leu	agg Arg	agt Ser 190	acc Thr	agc Ser	576
tgc Cys	agc Ser	gtc Val 195	aac Asn	cac His	ccc Pro	atc Ile	ttc Phe 200	caa Gln	ggg Gly	ggt Gly	gct Ala	cag Gln 205	ggc Gly	act Thr	ttc Phe	624
gta Val	gtc Val 210	aag Lys	ttc Phe	gat Asp	gtc Val	tcc Ser 215	tcc Ser	aag Lys	gcc Ala	agc Ser	ctg Leu 220	ggt Gly	gac Asp	agg Arg	ttg Leu	672
ctc Leu 225	atg Met	ggg Gly	gcc Ala	agt Ser	gcc Ala 230	agc Ser	agt Ser	gag Glu	aat Asn	aat Asn 235	aag Lys	cct Pro	gcg Ala	agc Ser	aac Asn 240	720
aag Lys	acc Thr	tcc Ser	ttt Phe	gag Glu 245	ctg Leu	gaa Glu	ctg Leu	cca Pro	gtg Val 250	aaa Lys	tac Tyr	gct Ala	gtc Val	tac Tyr 255	atg Met	768
atg Met	atc Ile	aca Thr 260	agg Arg	cac His	gaa Glu	ggc Gly	tcc Ser	acc Thr 265	agg Arg	ttc Phe	ttc Phe	aac Asn	ttt Phe 270	tcc Ser	act Thr	816
tcc Ser	gct Ala	gag Glu 275	aag Lys	agc Ser	agc Ser	aaa Lys	gag Glu 280	gcc Ala	gag Glu	cac His	cgc Arg	tat Tyr 285	cgg Arg	gtg Val	aac Asn	864
aac Asn 290	ctg Leu	agt Ser	ctg Leu	cga Arg	gat Asp	gtg Val 295	gcc Ala	gtc Val	agc Ser	gtg Val	gac Asp 300	ttc Phe	tgg Trp	gcc Ala	ccc Pro	912
gtg Val 305	cag Gln	ctg Leu	aac Asn	gga Gly	gca Ala 310	gct Ala	gtg Val	tgg Trp	gac Asp	gtg Val 315	gcg Ala	gtg Val	gag Glu	gcc Ala	cct Pro 320	960
gcc Ala	cag Gln	agc Ser	ctg Leu	ccc Pro 325	tgt Cys	gcg Ala	cgg Arg	gag Glu 330	agg Arg	gaa Glu	cct Pro	ccg Pro	agg Arg	acc Thr 335	tct Ser	1008
gac Asp	ctg Leu	agc Ser	cgg Arg 340	gtc Val	ccg Pro	ggg Gly	agt Ser	ccc Pro 345	gtg Val	ctg Leu	gac Asp	tgc Cys	agc Ser 350	gtt Val	gcg Ala	1056
cac His	tgc Cys 355	ctg Leu	agg Arg	ttc Phe	cgc Arg	tgc Cys	cac His 360	atc Ile	ccc Pro	tcc Ser	ttc Phe	agc Ser 365	gcc Ala	aag Lys	gag Glu	1104
gag Glu 370	ctc Leu	cac His	ttc Phe	acc Thr	ctg Leu	aag Lys 375	ggc Gly	aac Asn	ctc Leu	agc Ser	ttc Phe 380	gcc Ala	tgg Trp	gtc Val	agc Ser	1152
cag Gln 385	atg Met	ctg Leu	caa Gln	aag Lys	aag Lys 390	gtg Val	tcg Ser	gtg Val	gtg Val	agt Ser 395	gtg Val	gcc Ala	gag Glu	atc Ile	acc Thr 400	1200
ttc Phe	aac Asn	agg Arg	gcc Ala 405	gtg Val	tac Tyr	tcc Ser	caa Gln	gtt Val 410	ccg Pro	ggc Gly	gag Glu	gag Glu	ccc Pro	ttt Phe 415	atg Met	1248

aga gcc cag gtg gag acg gtg ctg gag gag tat gag gag cac gac ccc	1296
Arg Ala Gln Val Glu Thr Val Leu Glu Glu Tyr Glu Glu His Asp Pro	
420 425 430	
gtc ccc ctg gtg gtg ggc agc tgt gtg ggc ggc ctg ctg ctg ctg gct	1344
Val Pro Leu Val Val Gly Ser Cys Val Gly Gly Leu Leu Leu Leu Ala	
435 440 445	
ctc atc tca gcc acc ctg tac aag ctt ggc ttc ttc aag cgc cgg tac	1392
Leu Ile Ser Ala Thr Leu Tyr Lys Leu Gly Phe Phe Lys Arg Arg Tyr	
450 455 460	
aag gag atg ctg ggc gag aaa ccg gga gac gcg gcc acc ttc ccc ggg	1440
Lys Glu Met Leu Gly Glu Lys Pro Gly Asp Ala Ala Thr Phe Pro Gly	
465 470 475 480	
gag gac gcc agc tgc ggg gct tca gat ttg cct ttg tcc cag tg	1484
Glu Asp Ala Ser Cys Gly Ala Ser Asp Leu Pro Leu Ser Gln	
485 490	

<210> 103
 <211> 494
 <212> PRT
 <213> rabbit

<400> 103
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 20 25 30
 Arg Arg Lys Thr Leu Gly Leu Gly Arg His Cys Glu Thr Met Arg Leu
 35 40 45
 Leu Leu Pro Asp Cys Val Glu Asp Val Val Asn Pro Ile Val Leu His
 50 55 60
 Leu Asn Phe Ser Leu Glu Gly Gln Pro Ile Leu Ser Ser Gln Asn Leu
 65 70 75 80
 Arg Pro Val Leu Ala Thr Gly Ser Gln Asp His Phe Ile Ala Ser Leu
 85 90 95
 Pro Phe Glu Lys Asn Cys Gly Gln Asp Arg Leu Cys Glu Gly Asp Leu
 100 105 110
 Ser Ile Ser Phe Asn Phe Ser Gly Leu Asn Thr Leu Leu Val Gly Leu
 115 120 125
 Ser Leu Glu Leu Thr Val Thr Val Thr Val Arg Asn Glu Gly Glu Asp
 130 135 140
 Ser Tyr Gly Thr Ala Ile Thr Leu Tyr Tyr Pro Ala Gly Leu Ser Tyr
 145 150 155 160
 Arg Arg Val Ser Gly Gln Thr Gln Pro Trp Gln Arg Pro Leu His Leu
 165 170 175

0099494063604

Ala	Cys	Glu	Ala	Val	Pro	Thr	Glu	Ser	Glu	Gly	Leu	Arg	Ser	Thr	Ser		
			180					185					190				
Cys	Ser	Val	Asn	His	Pro	Ile	Phe	Gln	Gly	Gly	Ala	Gln	Gly	Thr	Phe		
		195					200					205					
Val	Val	Lys	Phe	Asp	Val	Ser	Ser	Lys	Ala	Ser	Leu	Gly	Asp	Arg	Leu		
	210					215					220						
Leu	Met	Gly	Ala	Ser	Ala	Ser	Ser	Glu	Asn	Asn	Lys	Pro	Ala	Ser	Asn		
225					230				235						240		
Lys	Thr	Ser	Phe	Glu	Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Met		
			245						250					255			
Met	Ile	Thr	Arg	His	Glu	Gly	Ser	Thr	Arg	Phe	Phe	Asn	Phe	Ser	Thr		
			260					265					270				
Ser	Ala	Glu	Lys	Ser	Ser	Lys	Glu	Ala	Glu	His	Arg	Tyr	Arg	Val	Asn		
		275					280					285					
Asn	Leu	Ser	Leu	Arg	Asp	Val	Ala	Val	Ser	Val	Asp	Phe	Trp	Ala	Pro		
	290					295					300						
Val	Gln	Leu	Asn	Gly	Ala	Ala	Val	Trp	Asp	Val	Ala	Val	Glu	Ala	Pro		
305					310					315					320		
Ala	Gln	Ser	Leu	Pro	Cys	Ala	Arg	Glu	Arg	Glu	Pro	Pro	Arg	Thr	Ser		
				325					330					335			
Asp	Leu	Ser	Arg	Val	Pro	Gly	Ser	Pro	Val	Leu	Asp	Cys	Ser	Val	Ala		
			340					345					350				
His	Cys	Leu	Arg	Phe	Arg	Cys	His	Ile	Pro	Ser	Phe	Ser	Ala	Lys	Glu		
		355					360					365					
Glu	Leu	His	Phe	Thr	Leu	Lys	Gly	Asn	Leu	Ser	Phe	Ala	Trp	Val	Ser		
	370					375					380						
Gln	Met	Leu	Gln	Lys	Lys	Val	Ser	Val	Val	Ser	Val	Ala	Glu	Ile	Thr		
385					390					395					400		
Phe	Asn	Arg	Ala	Val	Tyr	Ser	Gln	Val	Pro	Gly	Glu	Glu	Pro	Phe	Met		
				405					410					415			
Arg	Ala	Gln	Val	Glu	Thr	Val	Leu	Glu	Glu	Tyr	Glu	Glu	His	Asp	Pro		
			420					425					430				
Val	Pro	Leu	Val	Val	Gly	Ser	Cys	Val	Gly	Gly	Leu	Leu	Leu	Leu	Ala		
		435					440					445					
Leu	Ile	Ser	Ala	Thr	Leu	Tyr	Lys	Leu	Gly	Phe	Phe	Lys	Arg	Arg	Tyr		
	450					455					460						
Lys	Glu	Met	Leu	Gly	Glu	Lys	Pro	Gly	Asp	Ala	Ala	Thr	Phe	Pro	Gly		
465					470					475					480		
Glu	Asp	Ala	Ser	Cys	Gly	Ala	Ser	Asp	Leu	Pro	Leu	Ser	Gln				
				485					490								

00014-06260

<210> 104
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 104
tgtccaggac aagagatgga cattgc 26

<210> 105
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 105
gagctatttc atagcaagaa tggg 24

<210> 106
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 106
tatagcatag cgaatgatcc 20

<210> 107
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 107
atggtccgtg gagttgtgat c 21

<210> 108
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 108
tcgagatcca ccaaactgca c 21

<210> 109
<211> 14

Gly